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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,914	08/31/2001	Donald J. Remboski	IA00012	2193

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MOTOROLA, INC.
CORPORATE LAW DEPARTMENT - #56-238
3102 NORTH 56TH STREET
PHOENIX, AZ 85018

EXAMINER

LOUIS JACQUES, JACQUES H

ART UNIT PAPER NUMBER

3661

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,914

Applicant(s)

REMBOSKI ET AL.

Examiner

Jacques H Louis-Jacques

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 020904.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: 340. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-8 and 12-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Millsap et al [6,484,082].

Millsap discloses an in-vehicle network management using virtual networks. According to Millsap et al, there is an active network (10), a vehicle including the active network (column 4, lines 3-4 and figure 1), a first device (figure 1) and a second device (figure 1), wherein the first device and the second device are communicatively coupled by the active network (figure 1). See also the abstract. According also to Millsap et al, there is provided a data packet (message) for communication of data between the first device and the second device (abstract, column 2), the data packet (message) comprising a header portion, a data portion, a trailer portion and an active portion (figure 5 [80], columns 8-9). The active portion, according to Millsap et al, provides active data related to the configuration of the active network (figure 5 [86], column 2]. The active portion also provides active data related to the operation of one of the first device and the second device (figure 5 [82]). The active portion may be integrated with either the header portion or the data portion or the trailer portion. See also columns 2 and 3. Millsap et al, as reading from the disclosure, also discloses that the active network comprises a plurality of active network elements coupled by connection media, and wherein the active portion contains active data related to the configuration of the active network elements and, wherein the active portion represents a state of an active network element of the plurality of active network elements and wherein the active network is operable to communicate

the data packet corresponding to the state (column 3). See also columns 7 and 8. Additionally, the active portion, according to Millsap et al, contains active network timing information (columns 3 and 7). As described in columns 3 and 6, in particular, Millsap et al discloses that the active portion represents a packet state and wherein the active network is operable to communicate the data packet corresponding to the packet state, wherein the packet state represents an error state or a normal state. See also column 7. Furthermore, Millsap et al discloses that the active portion comprises information relating to the data packet origin and that the active portion comprises a receipt acknowledgement message (column 6). See also column 8.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millsap et al [6,484,082] in view of Tennenhouse et al [A Survey of Active Network Research].

While it is well known in the art for an [active] network to include active network elements, Millsap et al does not specifically identify these active network elements as being a switch, a bridge or a router. Tennenhouse et al, in the paper entitled "a survey of active network research", discloses an active network as having active network elements includes bridges, routers and switches for performing customized computations on the

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messages flowing through them. Thus, it would have been obvious to one skilled in the art at the time of the invention to be motivated to specify the active network elements because would provide safe and efficient execution of assigned tasks and improve flexibility, thereby tailoring specific node processing.

Response to Arguments

6. Applicants' remarks filed on May 27, 2004 have been entered and carefully considered by the examiner.

According to Applicant, an active network "include[s] nodes, coupled by connection media defining a plurality of communication paths between the nodes, capable of performing custom operations on the messages that pass through the nodes. An active network does not require a central server or computing resources. And, active network nodes are aware of the contents of messages transported and can participate in the processing and modification of the messages while they travel through the network." Emphasis added. See response at page 6.

Figure 20 of the present application illustrates a block diagram representative of a topology for a vehicle active network according to preferred embodiment of the claimed invention.

As described on pages 20 and 21 of the present application, Figure 20 shows an active network 340 includes a *backbone* 342 of interconnected active elements to which a plurality of devices 344-352 is communicatively coupled by interfaces 354-362, respectively to the backbone in a multi-drop arrangement... Communication link 364

may be formed of any suitable media, including wire, optical, radio frequency or combinations thereof. The device 348 therefore may communicate with the device 352 via the network 340 or directly via the peer communication link 364.

It is noted, however, item 340 (describing the active network) is not shown in the drawings. See figure 20.

In light of the above, the rejections previously applied against the claims have been withdrawn. However, the patent to Millsap et al (6,484,082) has been discovered, which discloses an in-vehicle network management using virtual networks. Millsap et al discloses a plurality of devices (e.g., ECUs) that are coupled through an active (virtual) network, wherein each of the plurality of devices (ECUs) performs custom operations on a message (data packet) sent through the network.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques H Louis-Jacques whose telephone number is 703-305-9757. The examiner can normally be reached on M-Th 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jacques H Louis-Jacques
Primary Examiner
Art Unit 3661

/jlj
July 8, 2004

Jacques H. Louis-Jacques
JACQUES H. LOUIS-JACQUES
PRIMARY EXAMINER